

CLAIMS

What is claimed is:

- 5 1. A method for proactively maintaining a telephone system local loop, the method comprising:
- communicating with a communications network and acquiring status information
associated with a Digital Loop Carrier; and
predicting proactive maintenance based upon the status information.
- 10 2. A method for proactively maintaining a telephone system local loop according to claim 1,
further comprising predicting proactive maintenance of the local loop based upon the status
information.
- 15 3. A method for proactively maintaining a telephone system local loop according to claim 1,
further comprising weighting the status information.
- 20 4. A method for proactively maintaining a telephone system local loop according to claim 1,
further comprising combining the status information with information from a Dynamic
Network Analyzer.
5. A method for proactively maintaining a telephone system local loop according to claim 1,
further comprising combining the status information with information from a Loop Facilities
and Control System.
- 25 6. A method for proactively maintaining a telephone system local loop according to claim 1,
further comprising generating work order information describing the predicted proactive
maintenance.

7. A method for proactively maintaining a telephone system local loop according to claim 6, further comprising dispatching the work order information.

8. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising interfacing with a technician dispatch system to dispatch work order information describing the predicted proactive maintenance.

9. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising updating the Digital Loop Carrier with completed service order information

10. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising interfacing with a TELCORDIA Tech Access System to dispatch work order information describing the predicted proactive maintenance.

11. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising interfacing with a Loop Maintenance Operating System to dispatch work order information describing the predicted proactive maintenance.

12. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising acquiring work order information from a Loop Maintenance Operating System.

13. A method for proactively maintaining a telephone system local loop, the method comprising:

communicating with a communications network and acquiring at least one of customer information associated with copper line pairs, service information associated with copper line pairs, and status information associated with a Digital Loop Carrier;

storing the acquired information;

combining the stored information; and

predicting proactive maintenance based upon the combined information.

14. A method for proactively maintaining a telephone system local loop according to claim 13,
wherein the step of combining the stored information further includes weighting the stored
information.

15. A method for proactively maintaining a telephone system local loop according to claim 13,
further comprising generating work order information describing the predicted proactive
maintenance.

16. A method for proactively maintaining a telephone system local loop according to claim 13,
further comprising dispatching work order information describing the predicted proactive
maintenance.

17. A system for predicting proactive maintenance of a telephone system local loop, the system
comprising:

a Dynamic Network Analyzer module communicating with a communications network
and acquiring Dynamic Network Analyzer information;

a Loop Facilities and Control System module communicating with the communications
network and acquiring Loop Facilities and Control System information;

a Digital Loop Carrier module communicating with the communications network and
acquiring Digital Loop Carrier information;

a database stored in memory, the database storing the acquired information; and

a processor capable of processing information stored in the database and of generating
proactive maintenance.

18. A computer program product for proactively maintaining a telephone system; comprising:

a computer-readable medium; and

a Digital Loop Carrier module stored on the medium, the Digital Loop Carrier Module coupled to a Digital Loop Carrier over a communications network, the Digital Loop Carrier module acquiring information concerning the Digital Loop Carrier.

5 19. A computer program product according to claim 18, further comprising a Dynamic Network Analyzer module stored on the medium, the Dynamic Network Analyzer module coupled to a Dynamic Network Analyzer over a communications network, the Dynamic Network Analyzer module acquiring information concerning the Dynamic Network Analyzer.

10 20. A computer program product according to claim 18, further comprising a Loop Facilities and Control System module stored on the medium, the Loop Facilities and Control System module coupled to a Loop Facilities and Control System over a communications network, the Loop Facilities and Control System module acquiring information concerning the Loop Facilities and Control System.